



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Katsumasa Nonoshita, et al.

Serial No. 10/582,564

Filed: June 12, 2006

For: NOVEL 2-HETEROARYL-SUBSTITUTED  
BENZIMIDAZOLE DERIVATIVEArt Unit: To Be AssignedExaminer: To Be AssignedCommissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR 1.97

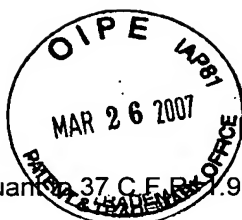
Sir:

1. In compliance with 37 C.F.R. 1.97, submitted on the attached form herewith is a list of patents, publications or other information which are requested to be made of record in this application. This Information Disclosure Statement is not an admission that any patent, publication or other information referred to herein is "prior art" for this invention. In accordance with 37 C.F.R. 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. 1.56(b).
2. In accordance with 37 C.F.R. 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.
3. Applicants respectfully request that the Examiner initial the attached form after reviewing the pertinence of each reference.
4. Pursuant to 37 C.F.R. 1.98 (a)(2)(ii), copies of each cited U.S. patent and each U.S. patent application publication are not enclosed herewith.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date appearing below.

MERCK &amp; CO., INC.

By Lamelo Spalding Date 3-23-07



## INFORMATION DISCLOSURE STATEMENT

5. Pursuant to 37 C.F.R. 1.98(d), copies of references listed on the attached form that were submitted to or cited by the Office in a related application upon which the instant application relies for an earlier filing date under 35 U.S.C. 120 are not enclosed. Related application(s) in which references were submitted to or cited by the Office are as follows:

RELATED APPLICATION		
U. S. SERIAL NUMBER	FILING DATE	MERCK CASE

If this is inconvenient, additional copies will be submitted upon request.

6. In accordance with 37 C.F.R. 1.97, (check one)

- ☐ the attached information is filed within three months of the filing date of the captioned case.
- ☒ the attached information is filed more than three months after the filing date but prior to the mailing of a first Office Action on the merits.
- ☐ the attached information is filed before the mailing of a first Office action after the filing of a request for continued examination under §1.114.
- ☐ the attached information is being filed more than three months after the filing date and after the mailing of a first Office Action on the merits, but before the mailing date of a Final Action, Notice of Allowance, or an action that otherwise closes prosecution in the application. The enclosed authorization is therefore given to charge Deposit Account No. 13-2755 for the fee required under 37 C.F.R. 1.17(p).
- ☐ each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement.
- ☐ each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart application *and this communication was not received by any individual designated in §1.56(c) more than thirty days prior to the filing of the information disclosure statement.*
- ☐ no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated under 37 C.F.R. 1.56(c) more than three months prior to the filing of this Statement.

Respectfully submitted,

By: Richard C. Billips  
Attorney \_\_\_\_\_ For Applicant(s)

Reg. No. 31,916  
MERCK & CO., INC.  
Patent Dept., RY60-30  
P.O. Box 2000  
Rahway, N.J. 07065-0907  
(732)594-4683

Date: 3/23/07

(use as many sheets as necessary)

INTERNATIONAL DISCLOSURE  
 PATENT BY APPLICATION  
 MAR 26 2008  
 PATENT & TRADEMARK OFFICE  
 Patent sheets are processed

**COMPLETE IF KNOWN**

<b>Application Number</b>	10/582,564
<b>Filing Date</b>	June 12, 2006
<b>First Named Inventor</b>	Katsumasa Nonoshita, et al.
Group Art Unit	To Be Assigned
Examiner Name	To Be Assigned

Sheet	1	of	2	Attorney Docket Number	BY0034YP
-------	---	----	---	------------------------	----------

[illegible][illegible]Date  
Considered

Computer generated form "IDS Form" (IDS Folder), Merck & Co., Inc., 8/24/2006

Substitute for form 1449B/PTO <b>INFORMATION DISCLOSURE                  STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>		<b>COMPLETE IF KNOWN</b>			
		Application Number	10/582,564		
		Filing Date	June 12, 2006		
		First Named Inventor	Katsumasa Nonoshita, et al.		
		Group Art Unit	To Be Assigned		
		Examiner Name	To Be Assigned		
Sheet	2	of	2	Attorney Docket Number	BY0034YP

NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.
	1	Grupe, A. et al., "Transgenic Knockouts Reveal a Critical Requirement for Pancreatic B Cell Glucokinase in Maintaining Glucose Homeostasis", Cell, Vol 83, pp 69-78, 1995
	2	Mitsunobu, O., "The Use of Diethyl Azodicarboxylate and Triphenylphosphine in Synthesis and Transformation of Natural Products", Synthesis, Vol 1, pp 1-28, 1981
	3	Tani, Junichi, et al., "Studies on biologically Active Halogenated Compounds IV Synthesis and Antibacterial Activity of Fluorinated Quinoline Derivatives", Chemical and Pharmaceutical Bulletin, Vol 30, pp 3530-3543, 1982
	4	Tasneem, et al., "Ammonium Nickel Sulphate Mediated Nitration of Aromatic Compounds with Nitric Acid", Synthetic Communications, Vol 31 (7), pp 1123-1127, 2001
	5	Fonseca, T. et al., "A short synthesis of phenanthrol[2,3-d]imidazoles from dehydroabiatic acid. Application of the methodology as a convenient route to benzimidazoles" Tetrahedron, Vol 57, pp 1793-1799, 2001
	6	Singh, M.P. et al., "Synthetic Utility of Catalytic Fe(III)/Fe(II) Redox Cycling Towards Fused Heterocycles: A Facile Access to Substituted Benzimidazole, Bis-benzimidazole and Imidazopyridine Derivatives" Synthesis, Vol 10, pp 1380-1390, 2000
	7	Singh, S.P. et al., "Reaction of 2-hydrazinobenzimidazole with B-diketones: A structural reinvestigation" Indian Journal of Chemistry, Vol 32, pp 262-265, 1993
	8	Ferre, T. et al., "Correction of diabetic alterations by glucokinase", Proc. Natl. Acad. Sci, Vol 93, pp 7225-7230, 1996
	9	Glaser, B. et al., "Familial Hyperinsulinism Caused by an Activating Glucokinase Mutation" The new England Journal of Medicine, Vol 338, pp 226-230, 1998
	10	Dolle, F. et al., "Synthesis and Nicotinic Acetylcholine Receptor in Vivo Binding Properties of 2-Fluoro-3-[2(S)-2-azetidylmethoxy]pyridine: A New Positron Emission Tomography Ligand for Nicotinic Receptors" J. Med. Chem, Vol 42, pp 2251-2259, 1999
	11	Sitzmann, M. E. et al., "Fluronitroanilines Reaction Control via Hydrogen Bonding", J. Org. Chem, Vol 43, (6), pp 1241-1243, 1978
	12	Vionnet, N. et al., "Nonsense mutation in the glucokinase gene causes early-onset non-insulin-dependent diabetes mellitus" Nature, Vol 356, pp 721-722, 1992

Examiner Signature	Date Considered
--------------------	-----------------

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.